Contents of Volume 22

Number 1

Regular papers

Z. Setkowicz, E. Bień and K. Janeczko 1 Contralateral response of macrophages and astrocytes to injury in the cerebral hemisphere of 6-day-old rat following prenatal gamma irradiation

C.S. Bavaresco, A.I. Zugno, B. Tagliari, C.M.D. Wannmacher, M. Wajner and A.T.S. Wyse 11 Inhibition of Na^+, K^+-ATPase activity in rat striatum by the metabolites accumulated in Lesch–Nyhan disease

A.K. Kondapi, N. Mulpuri, R.K. Mandraju, B. Sasikaran and K. Subba Rao 19 Analysis of age dependent changes of Topoisomerase II α and β in rat brain

C. Sinha, A.K. Agrawal, F. Islam, K. Seth, R.K. Chaturvedi, S. Shukla and P.K. Seth 31 Mosquito repellent (pyrethroid-based) induced dysfunction of blood–brain barrier permeability in developing brain

P.M. Whitington and H. Sink 39 Development of a polar morphology by identified embryonic motoneurons

B. Katbamna, A.M. Jelaso and C.F. Ide 47 Connexin 43 expression in glial cells of developing rhombomeres of *Xenopus laevis*

Corrigendum

R. Amodio, C. De Ruvo, A. Sacchetti, A. Di Santo, N. Martelli, V. Di Matteo, R. Lorenzet, A. Poggi, D. Rotilio, M. Cacchio and E. Esposito 57 Corrigendum to "Caffeic acid phenethyl ester blocks apoptosis induced by low potassium in cerebellar granule cells" [Int. J. Dev. Neurosci. 21 (2003) 379–389]

I Forthcoming papers

III Instructions to Authors

Number 2

Regular papers

K. Kiyosue, T.Y. Hiyama, K. Nakayama, M. Kasai and T. Taguchi 59 Re-expression of NR2B-containing NMDA receptors in vitro by suppression of neuronal activity

C.M. Tansini, K. Durigon, C.G. Testa, A. Belló-Klein, M. Wajner, C.M.D. Wannmacher, A.T.S. Wyse and C.S. Dutra-Filho 67 Effects of histidine and imidazolelactic acid on various parameters of the oxidative stress in cerebral cortex of young rats

E.A. Bushong, M.E. Martone and M.H. Ellisman 73 Maturation of astrocyte morphology and the establishment of astrocyte domains during postnatal hippocampal development

M.L. Leret, V. Peinado, L.M. Suárez, L. Tecedor, A. Gamallo and J.C. González 87 Role of maternal adrenal glands on the developing serotoninergic and amino-acidergic systems of the postnatal rat brain

A.R. Cornelio, V. Rodrigues Jr., A.T. de Souza Wyse, C.S. Dutra-Filho, M. Wajner and C.M.D. Wannmacher 95 Tryptophan reduces creatine kinase activity in the brain cortex of rats

G. Alquicer, A.B. Silva-Gómez, F. Peralta and G. Flores 103 Neonatal ventral hippocampus lesion alters the dopamine content in the limbic regions in postpubertal rats

A. Hari, B. Djohar, T. Skutella and S. Montazeri 113 Neurotrophins and extracellular matrix molecules modulate sensory axon outgrowth

I Forthcoming papers

III Instructions to Authors

Number 3

Discussion paper

Š. Miklič, D.M. Jurič and M. Čaman-Kržan 119 Differences in the regulation of BDNF and NGF synthesis in cultured neonatal rat astrocytes

Regular papers

T.S. Rao, K.D. Lariosa-Willingham, F.-F. Lin, N. Yu, C.-S. Tham, J. Chun and M. Webb 131 Growth factor pre-treatment differentially regulates phosphoinositide turnover downstream of lysophospholipid receptor and metabotropic glutamate receptors in cultured rat cerebrocortical astrocytes

T. Levav, T. Saar, L. Berkovich and H. Golan 137 Perinatal exposure to GABA-transaminase inhibitor impaired psychomotor function in the developing and adult mouse

S. Kanda, Y. Tamada, A. Yoshidome, I. Hayashi and T. Nishiyama 149 Over-expression of bHLH genes facilitate neural formation of mouse embryonic stem (ES) cells in vitro

P.M. Whitington, C. Quilkey and H. Sink 157 Necessity and redundancy of guidepost cells in the embryonic Drosophila CNS

U. Gärtner, A. Alpár, G. Seeger, R. Heumann and T. Arendt 165 Enhanced Ras activity in pyramidal neurons induces cellular hypertrophy and changes in afferent and intrinsic connectivity in synRas mice

I Forthcoming papers

III Instructions to Authors

Number 4

Regular papers

X. Wang, Y. Lu, H. Zhang, K. Wang, Q. He, Y. Wang, X. Liu, L. Li and X. Wang 175 Distinct efficacy of pre-differentiated versus intact fetal mesencephalon-derived human neural progenitor cells in alleviating rat model of Parkinson's disease

C. Matté, S.C. Monteiro, T. Calcagnotto, C.S. Bavaresco, C.A. Netto and A.T.S. Wyse 185 In vivo and in vitro effects of homocysteine on Na^+, K^+-ATPase activity in parietal, prefrontal and cingulate cortex of young rats

A.I. Zugno, R. Franzon, F. Chiarani, C.S. Bavaresco, C.M.D. Wannmacher, M. Wajner and A.T.S. Wyse 191 Evaluation of the mechanism underlying the inhibitory effect of guanidinoacetate on brain Na^+, K^+-ATPase activity

R.E. de Bittencourt-Navarrete, A. Giraldi-Guimarães and R. Mendez-Otero 197 A quantitative study of the neuronal nitric oxide synthase expression in the superficial layers of the adult rat superior colliculus after perinatal enucleation

I.A. Lopez, P.M. Zhao, M. Yamaguchi, J. de Vellis and A. Espinosa-Jeffrey 205 Stem/progenitor cells in the postnatal inner ear of the GFP-nestin transgenic mouse

B. Kablar 215 MyoD–*lacZ* transgenes are early markers in the neural retina, but MyoD function appears to be inhibited in the developing retinal cells

R.H. Fabian, J. Regino Perez-Polo and T.A. Kent 225 Extracellular superoxide concentration increases following cerebral hypoxia but does not affect cerebral blood flow

B. González, Ma. del Carmen Solano-Agama, M. González del Pliego and Ma.E. Mendoza-Garrido 231 Differences in cell migration of cultured pituitary cells from infantile and adult rats: participation of the extracellular matrix and epidermal growth factor

I Forthcoming papers

V Instructions to Authors

Numbers 5–6

Special Issue

DEVELOPMENTAL ASPECTS OF ADDICTION

Editorial

R.M. Booze and C.F. Mactutus 241 Developmental Aspects of Addiction

Papers

C.V. Vorhees, T.M. Reed, M.R. Skelton and M.T. Williams 247 Exposure to 3,4-methylenedioxymethamphetamine (MDMA) on postnatal days 11–20 induces reference but not working memory deficits in the Morris water maze in rats: implications of prior learning

J.S. Meyer, M. Grande, K. Johnson and S.F. Ali 261 Neurotoxic effects of MDMA ("ecstasy") administration to neonatal rats

M.T. Williams, M.S. Moran and C.V. Vorhees 273 Behavioral and growth effects induced by low dose methamphetamine administration during the neonatal period in rats

T.L. Foltz, D.M. Snow, B.J. Strupp, R.M. Booze and C.F. Mactutus 285 Prenatal intravenous cocaine and the heart rate-orienting response: a dose–response study

D.M. Snow, H.M. Carman, J.D. Smith, R.M. Booze, M.A. Welch and C.F. Mactutus 297 Cocaine-induced inhibition of process outgrowth in locus coeruleus neurons: role of gestational exposure period and offspring sex

J.-Q. Ren, C.J. Malanga, E. Tabit and B.E. Kosofsky 309 Neuropathological consequences of prenatal cocaine exposure in the mouse

J.M. Johns, D.A. Lubin, C.H. Walker, P. Joyner, C. Middleton, V. Hofler and M. McMurray 321 Gestational treatment with cocaine and fluoxetine alters oxytocin receptor number and binding affinity in lactating rat dams

J.R. Pauly, J.A. Sparks, K.F. Hauser and T.H. Pauly 329 In utero nicotine exposure causes persistent, gender-dependant changes in locomotor activity and sensitivity to nicotine in C57Bl/6 mice

B.M. Kelley and J.D. Rowan 339 Long-term, low-level adolescent nicotine exposure produces dose-dependent changes in cocaine sensitivity and reward in adult mice

A.H. Rezvani and E.D. Levin 349 Adolescent and adult rats respond differently to nicotine and alcohol: motor activity and body temperature

C. Land and N.E. Spear 355 Fear conditioning is impaired in adult rats by ethanol doses that do not affect periadolescents

M.D. Marino, M.Y. Aksenov and S.J. Kelly 363 Vitamin E protects against alcohol-induced cell loss and oxidative stress in the neonatal rat hippocampus

H. Zhu and G.A. Barr 379 The role of AMPA and metabotropic glutamate receptors on morphine withdrawal in infant rats

G.M. Anderson 397 Peripheral and central neurochemical effects of the selective serotonin reuptake inhibitors (SSRIs) in humans and nonhuman primates: assessing bioeffect and mechanisms of action

B.F. El-Khodor, M.H. Dimmler, D.A. Amara, M. Hofer, R. Hen and D. Brunner 405 Juvenile $5HT_{1B}$ receptor knockout mice exhibit reduced pharmacological sensitivity to $5HT_{1A}$ receptor activation

S. Moriceau, T.L. Roth, T. Okotoghaide and R.M. Sullivan 415 Corticosterone controls the developmental emergence of fear and amygdala function to predator odors in infant rat pups

S.L. Andersen and C.P. Navalta 423 Altering the course of neurodevelopment: a framework for understanding the enduring effects of psychotropic drugs

I Forthcoming papers

V Instructions to Authors

Number 7

Special Issue

MOLECULAR MECHANISMS OF NEURODEGENERATION AND NEUROPROTECTION — EXPERIMENTAL APPROACHES AND THE DISEASED BRAIN

Editorial

R. Schliebs 441 Molecular mechanisms of neurodegeneration and neuroprotection—experimental approaches and the diseased brain

Papers

C. Richter-Landsberg and N.G. Bauer 443 Tau-inclusion body formation in oligodendroglia: the role of stress proteins and proteasome inhibition

J. Götz, A. Schild, F. Hoerndli and L. Pennanen 453 Amyloid-induced neurofibrillary tangle formation in Alzheimer's disease: insight from transgenic mouse and tissue-culture models

S. Roßner 467 New players in old amyloid precursor protein-processing pathways

J. Apelt, M. Bigl, P. Wunderlich and R. Schliebs 475 Aging-related increase in oxidative stress correlates with developmental pattern of beta-secretase activity and beta-amyloid plaque formation in transgenic Tg2576 mice with Alzheimer-like pathology

K. Cole and J.R. Perez-Polo 485 Neuronal trauma model: in search of Thanatos

M. Burwinkel, C. Riemer, A. Schwarz, J. Schultz, S. Neidhold, T. Bamme and M. Baier 497 Role of cytokines and chemokines in prion infections of the central nervous system

T. Arendt 507 Neurodegeneration and plasticity

C.M. Morris and K.E. Wilson 515 High throughput approaches in neuroscience

M. Pick, C. Flores-Flores, D. Grisaru, S. Shochat, V. Deutsch and H. Soreq 523 Blood-cell-specific acetylcholinesterase splice variations under changing stimuli

P. Berghuis, M.B. Dobszay, R.M. Ibanez, P. Ernfors and T. Harkany 533 Turning the heterogeneous into homogeneous: studies on selectively isolated GABAergic interneuron subsets

M. Mousavi, I. Bednar and A. Nordberg	545	Selective changes in expression of different nicotinic receptor subtypes in brain and adrenal glands of mice carrying human mutated gene for APP or over-expressing human acetylcholinestrase
M. Strokin, M. Sergeeva and G. Reiser	551	Role of Ca^{2+}-independent phospholipase A_2 and $n-3$ polyunsaturated fatty acid docosahexaenoic acid in prostanoid production in brain: perspectives for protection in neuroinflammation
M. Gelderblom, S. Eminel, T. Herdegen and V. Waetzig	559	c-Jun N-terminal kinases (JNKs) and the cytoskeleton—functions beyond neurodegeneration
U. Krügel, T. Schraft, R. Regenthal, P. Illes and H. Kittner	565	Purinergic modulation of extracellular glutamate levels in the nucleus accumbens in vivo
	571	Poster and Lecture Abstracts
	I	Forthcoming papers
	III	Instructions to Authors

Number 8

ABSTRACTS TO THE 15TH BIENNIAL MEETING OF THE INTERNATIONAL SOCIETY FOR DEVELOPMENTAL NEUROSCIENCE, 4–7 AUGUST 2004, EDINBURGH, SCOTLAND

601	Oral Abstracts
633	Abstracts
I	Presenters' index
V	Forthcoming papers
IX	Volume 22 Contents, Author and Keyword Index
XXI	Instructions to Authors